1: Petrullo E-3 (1933-34) 1939 SS19 Yaruro SS19

bow and arrows, digging sticks, baskets, small hammocks, a water jar or two, a mortar and pestle, several fishhooks, fire sticks, and scraps of clothing. As a rule, each family will possess the minimum of these objects.

CANOES.—A typical Yaruro canoe measured about 18 feet long. Its longitudinal cross section was as shown in plate 16, *3*. It was made of the "salao" wood.

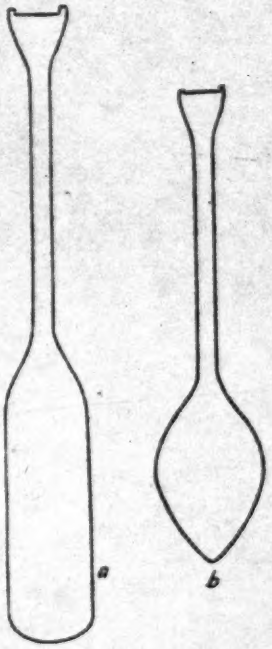

FIGURE 16.—Paddles. *a*, Type usually used by stern paddler. *b*, Generally used in the bow.

The only tools that the Yaruros have to fashion such a canoe are crude machetes, perhaps an ax, and fire. The canoes are never regular in outline and on the whole are rather crude. Both bow and stern end in a point and the bottom is round. These canoes are unstable, difficult to maneuver, and will split easily. No crosspieces are used to reinforce the canoe.

PADDLES.—Paddles are of two types, as shown in figure 16. The large paddles measure about 4 feet in length; the smaller paddles slightly over 3 feet. They are as crudely fashioned as the canoes and increase the difficulties of paddling.

BOWS.—The bows are fashioned from macanilla or the mahaguillo wood. A large bow will measure about 6 feet, but most of them are closer to 5 feet. The inner surface of the bow is generally flat and the outer is curved. The greatest width on one such bow was about 1½ inches and its thickness less than 1 inch. When the string is relaxed these bows are perfectly straight. They are not reinforced unless they show signs of splitting. On the whole, these bows are inferior to those made by many other tribes in South America. The bow string is tied as shown in figure 17, *e*, *f*, *g*,[1] with three clove-hitch knots.

ARROWS.—The Yaruros, like most other South American primitives, have a variety of arrows, each type being designed for a specific purpose. A fish arrow consists of a reed shaft to which is attached a bone point with resin and string. Often the upper end of the bone point will protrude away from the shaft to form a small barb. Three feathers are used and fastened as shown in figure 18, *f*, *j*, *k*.[2] At the feathers' end of the arrow a notched piece of Brazil-wood is inserted.

A somewhat similar arrow with an iron point is made. In this case the point is inserted into a worked piece of wood which, in turn,

1 [See category 116, p. 205. --- Analyst]
2 [See category 116, p. 206. --- Analyst]